

**Amendments to the claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (ORIGINAL) A process for producing a crystalline nucleus, wherein the crystalline nucleus is generated by irradiating a solution in which a solute to be crystallized has dissolved, with at least one pulsed laser selected from a picosecond pulsed laser and a femtosecond pulsed laser.
2. (ORIGINAL) The production process according to claim 1, wherein the crystalline nucleus is generated by focusing the pulsed laser in the solution with a lens and causing a local explosion phenomenon once or more in a position on which the pulsed laser is focused.
3. (CURRENTLY AMENDED) The production process according to claim 1 ~~or~~ 2, wherein when the laser irradiation is carried out once, the pulsed laser has a pulse peak power of at least  $5 \times 10^5$  (watt).
4. (CURRENTLY AMENDED) The production process according to ~~any one of claims 1 to 3~~ claim 1, wherein when the laser irradiation is carried out once, the pulsed laser has a pulse energy of at least 60 nJ/pulse.
5. (CURRENTLY AMENDED) The production process according to claim 1 ~~or~~ 2, wherein when the laser irradiation is carried out at 1000 pulses or more per second, the pulsed laser has a pulse peak power of at least  $1 \times 10^4$  (watt).

6. (CURRENTLY AMENDED) The production process according to claim 1, ~~2, or 5~~, wherein when the laser irradiation is carried out at 1000 pulses or more per second, the pulsed laser has a pulse energy of at least 1.95 nJ/pulse.

7. (CANCELED)

8. (CURRENTLY AMENDED) The production process according to ~~any one of claims 1 to 7~~ claim 1, wherein the number of times the solution is irradiated with the pulsed laser is a single shot to 10 million shots.

9. (CURRENTLY AMENDED) The production process according to ~~any one of claims 1 to 8~~ claim 1, wherein the solution is a supersaturated solution.

10. (CURRENTLY AMENDED) A process for producing a crystal, wherein a crystalline nucleus is allowed to be generated in a solution by a process according to ~~any one of claims 1 to 9~~ claim 1 and then a crystal is grown thereon.

11. (ORIGINAL) The production process according to claim 10, wherein a solute to be crystallized is an organic substance.

12. (ORIGINAL) The production process according to claim 10, wherein a solute to be crystallized is protein.

13. - 25. (CANCELED)

26. (ORIGINAL) The production process according to claim 10, wherein a container including the solution is allowed to make a movement to stir the solution and thereby the crystal is generated and grown.

27. (ORIGINAL) The production process according to claim 26, wherein the movement is a movement selected from rotation, vibration, and rocking or a movement in which two or more of them are combined together.

28. (CURRENTLY AMENDED) The production process according to claim 26 ~~or 27~~, wherein the container is a well plate including a plurality of wells, and each of the wells contains the solution.

29. (CURRENTLY AMENDED) The production process according to ~~any one of claims 26 to 28~~ claim 26, wherein the solution is brought into a supersaturation state by evaporating a solvent contained in the solution or changing temperature of the solution.

30. (CURRENTLY AMENDED) The production process according to ~~any one of claims 26 to 29~~ claim 26, wherein a liquid with a higher specific gravity than that of the solution is put in the container, and the crystal is grown at an interface between the liquid with a higher specific gravity and the solution.

31. (CURRENTLY AMENDED) The production process according to ~~any one of claims 26 to 30~~ claim 26, wherein another container is prepared that contains a reservoir solution in which components other than the solute of the solution have dissolved at higher concentrations than in the solution, and then a crystal of the solute is generated and grown in a state where water vapor can move between the another container and the container including the solute.

32. - 44. (CANCELED)